

PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 351 AND CRESTWOOD BOULEVARD TO PROVIDE FOR A DOUBLE RIGHT FOR THE WEST TO NORTH MOVEMENT OF CRESTWOOD BLVD. MD 351 IS IN FREDERICK COUNTY AN ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

II. INTERSECTION OPERATION

THE INTERSECTION OPERATES IN A NEMA SIX-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH EXCLUSIVE/PERMISSIVE LEFT TURN PHASING FOR THE NORTH AND SOUTH MOVEMENTS OF MD 351. ASSOCIATED WITH THE MD 351 EXCLUSIVE/PERMISSIVE LEFT TURN PHASING IS A CONCURRENT RIGHT TURN FOR THE WEST TO NORTH MOVEMENT OF CRESTWOOD BLVD. THE CRESTWOOD BLVD. MOVEMENTS OPERATE SEPARATELY AS A SPLIT PHASE OPERATION. THERE IS ALTERNATE PEDESTRIAN PHASING FOR ALL LEGS OF THE INTERSECTION.

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY FREDERICK COUNTY

ITEM	QUANTITY	UNIT	DESCRIPTION
9570	30	SF	[UPDATED] SHEET ALUMINUM GROUND MOUNTED SIGN
		EA	R3-7R MODIFIED (30" X 30") GROUND MOUNTED
		EA	R3-8 MODIFIED (48" X 30") GROUND MOUNTED
		EA	R4-7 (24" X 30") GROUND MOUNTED
		EA	R5-2 (30" X 30") GROUND MOUNTED
		EA	OM-1 (18" X 18") GROUND MOUNTED
9571	15	SF	[UPDATED] SHEET ALUMINUM MAST ARM / POLE MOUNTED SIGN
	2	EA	R3-5R (30" X 36") MAST ARM MOUNTED

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

ITEM	QUANTITY	UNIT	DESCRIPTION
1001	1	EA	MAINTENANCE OF TRAFFIC PER ASSIGNMENT
1002	320	LF	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS, ANY WIDTH
1003	4	EA	REMOVAL OF EXISTING PAVEMENT LETTERS, SYMBOLS, ARROWS AND NUMBERS
2002	1	CY	TEST PIT EXCAVATION
5001	375	LF	5 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
5002	70	LF	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
5003	90	LF	24 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
8001	6	EA	12 INCH (R, Y, G) LED SIGNAL HEAD
8007	2	EA	8 INCH LED SIGNAL (R,Y,G) HEAD SECTION
8009	1	EA	ADJUST HANDHOLE TO GRADE
8016	1	EA	REMOVE & DISPOSE OF EQUIPMENT PER ASSIGNMENT
8022	2025	LF	DISCONNECT, PULL-BACK & REROUTE CABLE
8032	65	LF	WOOD SIGN SUPPORTS 4 INCH X 6 INCH
8045	30	SF	INSTALL GROUND MOUNTED SIGN
8046	15	SF	INSTALL OVERHEAD SIGN
8058	495	LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO.14 AWG)
NEG	105	SF	WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LEGENDS AND SYMBOLS

CONTACTS

THE CONTACT PERSONS ARE:

MR. JOHN CONCANNON  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (301) 624-8140

MS. ANDREA ABEND  
DISTRICT UTILITIES ENGINEER  
PHONE: (301) 624-8116

MR. RAY JOHNSON  
MAINTENANCE ENGINEER  
PHONE: (301) 624-8107

MR. RICHARD DAFF  
SR. CHIEF TRAFFIC OPERATIONS DIVISION  
PHONE: (410) 787-7630

MR. GREGORY JONES  
FREDERICK COUNTY DPW  
PHONE: (301)-600-2379

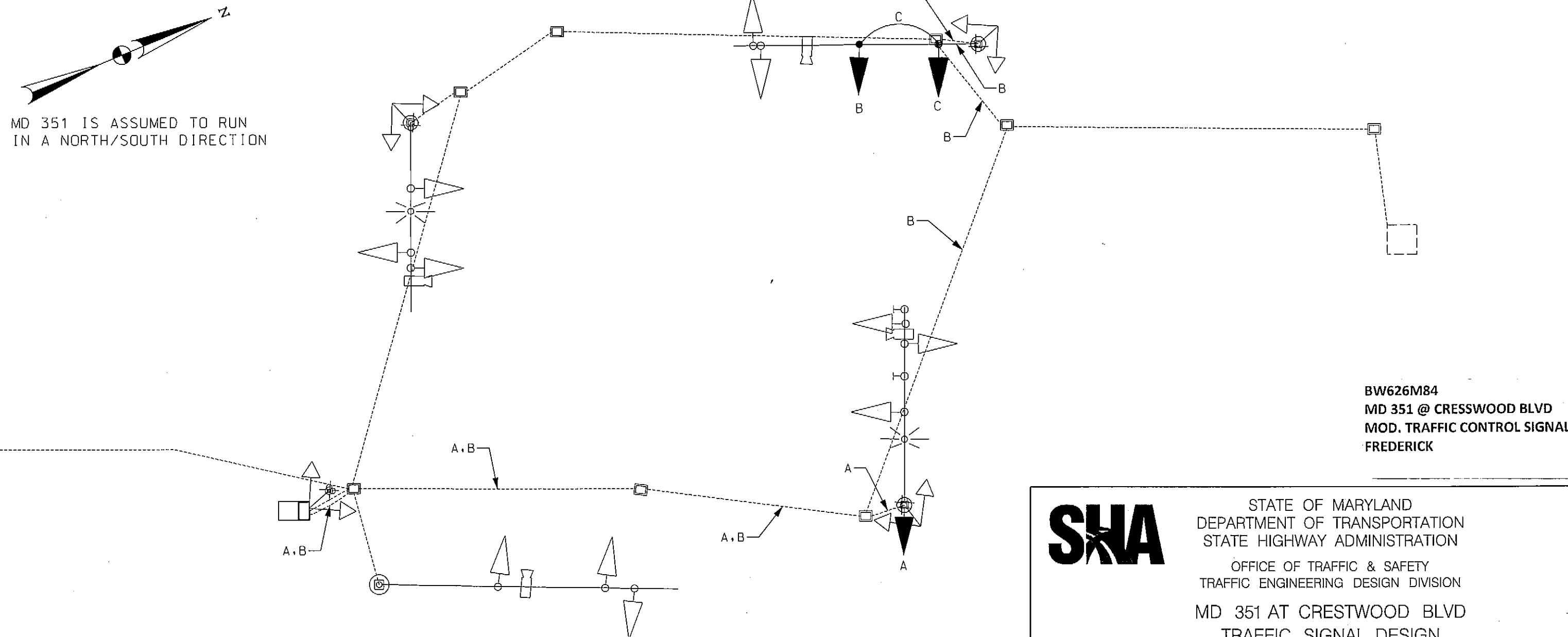
MR. DONNIE CRUM  
ASSISTANT SUPERINTENDANT  
FREDERICK COUNTY  
PHONE: (301)-600-1565

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
PHASE 1 AND 5	←GR	←GR	R	←GR	←GR	R	R	R	R	R	R	RG→	R	RG→	RG→	DW	DW	DW	DW	DW	DW	DW
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6																						
PHASE 1 AND 6	←GG	←GG	G	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
1 AND 6 CHANGE	←YG	←YG	G	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 AND 5	R	R	R	←GG	←GG	G	R	R	R	R	RG→	R	RG→	RG→	DW	DW	DW	DW	DW	DW	DW	DW
2 AND 5 CHANGE	R	R	R	←YG	←YG	G	R	R	R	R	RY→	R	RY→	RY→	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 AND 6	G	G	G	G	G	G	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
2 AND 6 ALT	G	G	G	G	G	G	R	R	R	R	R	R	R	R	WK	WK	WK	DW	DW	DW	DW	DW
PED. CLEARANCE	G	G	G	G	G	G	R	R	R	R	R	R	R	R	FLOW	FLOW	FLOW	DW	DW	DW	DW	DW
2 AND 6 ALT CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3	R	R	R	R	R	R	G	G	G	G	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
3 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3 ALT	R	R	R	R	R	R	G	G	G	G	R	R	R	R	DW	DW	DW	DW	WK	DW	WK	DW
PED. CLEARANCE	R	R	R	R	R	R	G	G	G	G	R	R	R	R	DW	DW	DW	DW	FLDW	DW	FLDW	DW
PHASE 3 ALT CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4	R	R	R	R	R	R	R	R	R	G	G	G	G	G	DW	DW	DW	DW	DW	DW	DW	DW
4 CHANGE	R	R	R	R	R	R	R	R	R	Y	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 ALT	R	R	R	R	R	R	R	R	R	G	G	G	G	G	DW	DW	DW	DW	DW	WK	DW	WK
PED. CLEARANCE	R	R	R	R	R	R	R	R	R	G	G	G	G	G	DW	DW	DW	DW	DW	FLDW	DW	FLDW
4 ALT CHANGE	R	R	R	R	R	R	R	R	R	Y	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK

NOTE: IF PHASE 5 IS ACTUATED, SIGNAL HEADS 11,13 AND 14 WILL HOLD THE RIGHT TURN ARROW FOLLOWING PHASE 4.

WIRING DIAGRAM



WIRING KEY

A,B,C } 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)

NOTE: ALL EXISTING WIRES WILL STAY.

BW626M84  
MD 351 @ CRESSWOOD BLVD  
MOD. TRAFFIC CONTROL SIGNAL  
FREDERICK

STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 351 AT CRESTWOOD BLVD  
TRAFFIC SIGNAL DESIGN  
FREDERICK, MD

GENERAL INFORMATION PLAN SHEET

SCALE: NTS DATE: 082009 CONTRACT NO.:

DESIGNED BY: XM COUNTY: FREDERICK  
DRAWN BY: XM LOGMILE: 10035100.61  
CHECKED BY: JB TMS NO.: J355  
F.A.P. NO.: TOD NO.:

TS NO. 3488D DRAWING: 3 OF 3 SHEET NO. 3 OF 3

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PLOTTED: Wednesday, October 28, 2009 AT 11:52 AM  
FILE: p:\07-006 frederick-traffic\md 351 @ cresswood.d\drawings\cadd\working\p006-F000\_MD351@Crestwood3vld.dgn